

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A micro-particle array analyzing system comprising:
a vessel holding a plurality of magnetic micro-particles, said vessel being arranged to receive a sample therein;
a plurality of independently-controlled magnetic members disposed outside of the vessel, for magnetically controlling a relative position of the magnetic micro-particles with respect to the vessel, wherein the plurality of magnetic members are arranged and independently controlled to apply magnetic fields to the magnetic micro-particles in response to respective signals received by each of the magnetic members independently; and
a solution flow-controlling unit controlling introducing means for introducing a solution flow-in into the vessel; and
a magnetic member controlling unit controlling on/off setting of the magnetic members to switch on/off application of magnetic fields to the magnetic members,
wherein the magnetic member controlling unit sets each of the plurality of magnetic members is arranged to be set off by a corresponding one of the independently-received signals in order of location from downstream of the solution flow, after-setting each of the plurality of magnetic members has been set on by a corresponding one of the independently-received signals in order of location from downstream of the solution flow.

2. (previously presented) The micro-particle array analyzing system according to Claim 19, wherein the vessel holds first and second magnetic micro-particles, and each of the non-magnetic micro-particles has a probe immobilized to a surface thereof, and is sandwiched between the first and second magnetic micro-particles.

3. (previously presented) The micro-particle array analyzing system according to Claim 19, wherein at least one of the magnetic micro-particles has a probe immobilized to a surface thereof.

4. (previously presented) The micro-particle array analyzing system according to Claim 2, further comprising:
a detector for detecting a bond between one of the probes and an organism-related molecule included in the sample; and
an analyzer for analyzing a result of detection by the detector.

5. (previously presented) The micro-particle array analyzing system according to Claim 19, wherein the magnetic members are movably provided outside of the vessel.

6. (previously presented) The micro-particle array analyzing system according to Claim 19, wherein the magnetic members are electromagnets provided outside of the vessel, and the electromagnets move the magnetic micro-particles by

controlling capturing to the electromagnets and dissociation from the electromagnets of the magnetic micro-particles in accordance with a variation of the magnetic fields generated by the electromagnets.

7. (previously presented) The micro-particle array analyzing system according to Claim 19, wherein the vessel has branched channels, the magnetic micro-particles and the non-magnetic micro-particles are each included in one of the branched channels, and at least one of the magnetic micro-particles or non-magnetic micro-particles is taken out from an opening end of a different one of the branched channels than said one of the branched channels by the on/off switching of the magnetic fields moving the magnetic micro-particles.

8. (previously presented) The micro-particle array analyzing system according to Claim 19, further comprising:

a transport mechanism for transporting particular molecules in a sample by collecting one of the magnetic micro-particles or non-magnetic micro-particles from an opening end of the vessel to which the collected particle is moved by the on/off switching of the magnetic fields; and

an electrophoresis apparatus connected to the transport mechanism.

9. (previously presented) The micro-particle array analyzing system according to Claim 19, further comprising:

a transport mechanism for transporting particular molecules in a sample by collecting one of the magnetic micro-particles or non-magnetic micro-particles from

an opening end of the vessel to which the collected particle is moved by the on/off switching of the magnetic fields; and

a mass spectroscope connected to the transport mechanism.

10. – 18. (canceled)

19. (previously presented) The micro-particle array analyzing system according to claim 1, further comprising a plurality of non-magnetic micro-particles held by the vessel, wherein the magnetic micro-particles and non-magnetic micro-particles are arranged in a sequence within the vessel.

20. (canceled)

21. (previously presented) The micro-particle array analyzing system according to claim 1, further comprising a collecting vessel collecting one of the magnetic micro-particles moved by the on/off switching of the magnetic fields.

22. (canceled)

23. (new) The micro-particle array analyzing system according to claim 1, wherein the magnetic micro-particles are collected one-by-one from an opening end of the vessel by the on/off switching of the magnetic fields in response to corresponding ones of the independently-received signals.

24. (new) The micro-particle array analyzing system according to claim 1, wherein the solution flow introducing means is arranged to introduce the solution into the vessel so as to convey the magnetic micro-particles one-by-one from the opening end of the vessel as the on/off switching of the magnetic fields releases the magnetic particle closest to the opening end of the vessel.

25. (new) The micro-particle array analyzing system according to claim 1, further comprising a washing solution vessel arranged to hold a washing solution, wherein the solution flow introducing means is arranged to introduce the washing solution into the vessel before the plurality of magnetic members are set on and then off in order of location from downstream of the solution flow.

26. (new) The micro-particle array analyzing system according to claim 1, wherein an individual one of the magnetic micro-particles is collected from an opening end of the vessel by the on/off switching of the magnetic fields in response to corresponding ones of the independently-received signals.

27. (new) The micro-particle array analyzing system according to claim 1, wherein the vessel holds the plurality of magnetic micro-particles in a single line therein, and each of the plurality of magnetic micro-particles has a diameter that is larger than one-half the inner diameter of the vessel.

28. (new) The micro-particle array analyzing system according to claim 1, wherein the magnetic micro-particles are arranged to be controlled so that a single

one of the magnetic micro-particles is collected individually from an opening end of the vessel, by switching on the magnetic member that applies the magnetic field to control the position of the magnetic micro-particle that is most downstream of the plurality of magnetic micro-particles and closest to the opening end of the vessel; and then by switching off the magnetic member that applies the magnetic field to control the position of said most-downstream magnetic micro-particle, while retaining switched on the magnetic member that applies the magnetic field to control the position of the magnetic micro-particle that is next in line to said most-downstream magnetic particle.

29. (new) The micro-particle array analyzing system according to claim 19, wherein the magnetic micro-particles and non-magnetic micro-particles are collected one-by-one from an opening end of the vessel by the on/off switching of the magnetic fields in response to corresponding ones of the independently-received signals.

30. (new) The micro-particle array analyzing system according to claim 19, wherein the solution flow introducing means is arranged to introduce the solution into the vessel so as to convey the magnetic micro-particles and non-magnetic particles one-by-one from the opening end of the vessel as the on/off switching of the magnetic fields releases the magnetic particle closest to the opening end of the vessel.

31. (new) The micro-particle array analyzing system according to claim 19, further comprising a washing solution vessel arranged to hold a washing solution, wherein the solution flow introducing means is arranged to introduce the washing solution into the vessel before the plurality of magnetic members are set on and then off in order of location from downstream of the solution flow.

32. (new) The micro-particle array analyzing system according to claim 19, wherein an individual one of the magnetic and non-magnetic micro-particles is collected from an opening end of the vessel by the on/off switching of the magnetic fields in response to corresponding ones of the independently-received signals.

33. (new) The micro-particle array analyzing system according to claim 19, wherein the vessel holds the plurality of magnetic micro-particles and non-magnetic micro-particles in a single line therein, and each of the plurality of magnetic micro-particles and non-magnetic micro-particles has a diameter that is larger than one-half the inner diameter of the vessel.

34. (new) The micro-particle array analyzing system according to claim 19, wherein the magnetic micro-particles are arranged to be controlled so that the magnetic and non-magnetic micro-particles are collected individually one-by-one from an opening end of the vessel, by switching on the magnetic member that applies the magnetic field to control the position of the magnetic micro-particle that is most downstream of the plurality of magnetic micro-particles and closest to the opening end of the vessel; and then by switching off the magnetic member that

applies the magnetic field to control the position of said most-downstream magnetic micro-particle, while retaining switched on the magnetic member that applies the magnetic field to control the position of said next-most downstream magnetic micro-particle.